

Appln. No.: NOT YET ASSIGNED
PRELIMINARY AMENDMENT

IN THE SPECIFICATION

Please insert the attached one page abstract at the end of the application:
(see attached Abstract)

Please change the heading found at line 1, page 1:

Description

BACKGROUND OF THE INVENTION

1. Technical Field

Please replace the paragraph beginning at line 2 of page one as follows:

The present invention concerns a piston rings, and more particularly to the geometry of the piston ring featuring a groove forming a piston ring gap, a friction surface, and an inner circumferential surface, said surfaces connected by upper and lower plane surfaces, the whole configured in such a way that the inner circumferential surface shows a non-constant variation in its cross section which, when viewed along the circumference, is more pronounced in the area near the piston ring gap than in the area diametrically opposite the gap.

2. Related Art

DE-C 39 20 449 shows a self-tightening, air-tight piston ring, the upper plane surface of which, in the installed position, is in contact with the piston's grooved plane surface from the mid-point of the latter's radius to its center. The piston ring's lower plane surface is sloped, relative to the piston's grooved surface, such that the latter, from the mid-point of its radius to its center, is likewise in contact with the piston ring. The cross-section of the inner circumferential surface shows a variation in the form of a bevel.

Please insert the following heading immediately prior to line 20 of page 1:

SUMMARY OF THE INVENTION AND ADVANTAGES

Please replace the paragraph beginning on line 24 of page 1 and ending on line 2 of page 2 as follows:

This assignment objective is accomplished by the piston ring having a wall thickness varying the circumferential surface, where the area of the joint has a lesser wall thickness as compared to the area diametrically opposed to the joint, where the relationship of wall thickness to circumferential surface is consistently so formed that the piston ring, viewed across its surface, exhibits a constant angle of twist.

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Please delete the paragraph beginning on line 3 of page 2 in its entirety as follows:

~~Supplemental additional drawings on the points of this invention are available under the subordinate claims.~~

Please replace the paragraph at line 19 of page 2 as follows:

$\varphi = Mt / *2I \underline{G*I}(\varphi)$

Please insert the following heading immediately prior to line 1 of page 3:

THE DRAWINGS

Please replace the paragraph beginning at line 1 of page 3 with the following rewritten paragraph:

The subject of this invention is represented in the drawing examples in the diagrams and can be described as follows. These are shown:

Please replace the paragraph beginning at line 3 of page 3 with the following rewritten paragraph:

Figure 1 is a [[P]]piston [[R]]ring with non-constant cross-section cut;

Please replace the paragraph beginning at line 4 of page 3 with the following rewritten paragraph:

Figures 2 to 4 show [[V]]various cross-sections of the piston ring in accordance with Figure 1;

Please replace the paragraph beginning at line 5 of page 3 with the following rewritten paragraph:

Figure 5 is a [[P]]piston ring according to the prior art having uniform compared to state of the art for like wall thicknesses and consistent cross-section cut; and

Please replace the paragraph beginning at line 7 of page 3 with the following rewritten paragraph:

Figure 6 illustrates Instructions on the angle of twist in accordance with the current state of the art (Figure 5) as well as with the invention characteristics of the piston ring in

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accordance with Figure 1.

Please insert the following heading immediately prior to line 10 on page 3:

DETAILED DESCRIPTION